



July 2009

**DEPARTMENT OF EDUCATION**  
2008–2009 School Year Reports

Dear School Board Members and School Personnel:

The Maine Educational Assessment (MEA) is the State's measure of student progress in achieving the State accountability standards of Maine's *Learning Results*. The *Learning Results* contain goals for what all students should know and be able to do at certain times in their school careers and include the accountability standards that are assessed for each grade. The MEA is administered to students in all grades 3 through 8 to meet state assessment requirements and the requirements of the federal *No Child Left Behind* Act.

The 2008-2009 MEA Summary Reports contain the results of student achievement in reading and mathematics at all grades and science at grades 5 and 8 and disaggregated by student and school characteristics. This report, together with MEA individual student and subject-specific class analysis reports, provides support for use in program evaluation and planning.

MEA results reflect scores based on test questions that are taken in common by the approximately 15,000 students in each grade level. Students' scores in each content area are based on answers to a combination of multiple-choice questions and questions that require students to construct an answer. More information about the MEA is available at [www.maine.gov/education/mea/index.htm](http://www.maine.gov/education/mea/index.htm).

I look forward to working with you in support of our continued efforts to improve the quality and effectiveness of the instructional opportunities designed to help all students achieve the high standards of the *Learning Results* and demonstrate that achievement through performance on the assessments.

Sincerely,

Susan A. Gendron  
Commissioner of Education



## School Report Grade 4

Test Date: March 2009  
Code: 11551874  
SAU: South Portland School Dept  
School: Frank I Brown Elementary School

### Contents of the Report

The report is divided into two main sections including a section describing the students tested and a separate section for the results in each content area.

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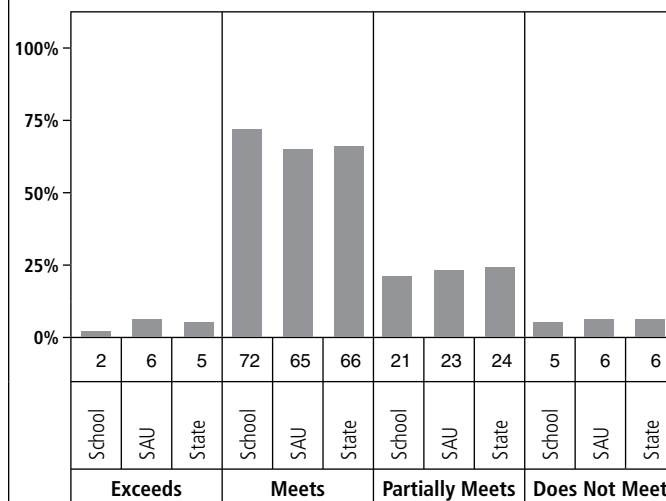
# SUMMARY OF SCORES

Test Date: March 2009  
 Grade: 4  
 SAU: South Portland School Dept  
 School: Frank I Brown Elementary School

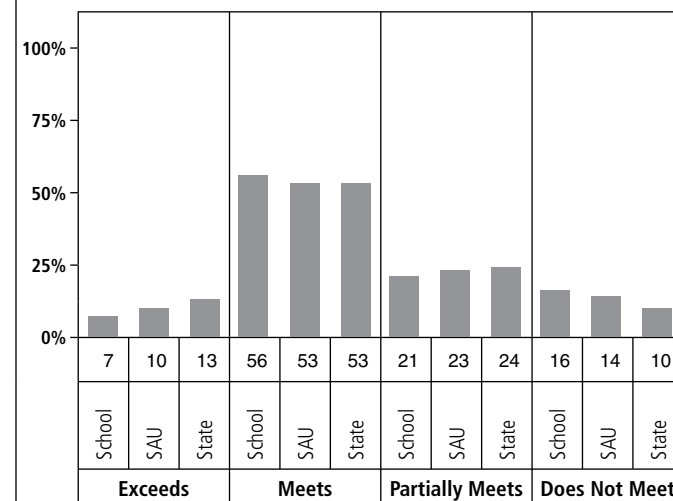
## Summary of School, SAU, and State Scores

| Year                 | Average Scaled Score |            |            |
|----------------------|----------------------|------------|------------|
|                      | School               | SAU        | State      |
| <b>ELA – Reading</b> |                      |            |            |
| 2006–2007            | 447                  | 447        | 445        |
| 2007–2008            | 447                  | 445        | 445        |
| <b>2008–2009</b>     | <b>447</b>           | <b>446</b> | <b>446</b> |
| Cum. Avg.*           | 447                  | 446        | 445        |
| <b>Mathematics</b>   |                      |            |            |
| 2006–2007            | 445                  | 445        | 445        |
| 2007–2008            | 447                  | 444        | 445        |
| <b>2008–2009</b>     | <b>445</b>           | <b>445</b> | <b>446</b> |
| Cum. Avg.*           | 446                  | 445        | 445        |

## ELA – READING



## MATHEMATICS



\*Cumulative averages are weighted, i.e., the scaled scores are averaged proportionally based on the numbers of students in each year.

# SUMMARY OF STUDENT PARTICIPATION

Test Date: March 2009  
Grade: 4  
SAU: South Portland School Dept  
School: Frank I Brown Elementary School

| CATEGORY OF PARTICIPATION               | Enrollment <sup>1</sup><br>during testing window |     |     |     |       |     | CONTENT AREA PARTICIPATION <sup>2</sup> |     |     |     |       |     |             |     |     |     |       |     |        |   |     |   |       |   |
|---|--|-----|-----|-----|-------|-----|---|-----|-----|-----|-------|-----|-------------|-----|-----|-----|-------|-----|--------|---|-----|---|-------|---|
|   |  |     |     |     |       |     | ELA-Reading                             |     |     |     |       |     | Mathematics |     |     |     |       |     |        |   |     |   |       |   |
|   | School   |     | SAU |     | State |     | School                                  |     | SAU |     | State |     | School      |     | SAU |     | State |     | School |   | SAU |   | State |   |
|   | n  | %   | n   | %   | n     | %   | n                                       | %   | n   | %   | n     | %   | n           | %   | n   | %   | n     | %   | n      | % | n   | % | n     | % |
| <b>Total number of students</b>         | 43   | 100 | 204 | 100 | 13805 | 100 | 43                                      | 100 | 204 | 100 | 13737 | 100 | 43          | 100 | 204 | 100 | 13746 | 100 |        |   |     |   |       |   |
| <b>Ethnicity</b> African American/Black | 2  | 5   | 13  | 6   | 419   | 3   | 2                                       | 100 | 13  | 100 | 410   | 98  | 2           | 100 | 13  | 100 | 416   | 99  |        |   |     |   |       |   |
| American Indian or Native Alaskan       | 0  | 0   | 1   | 0   | 125   | 1   | 0                                       | 0   | 1   | 100 | 124   | 99  | 0           | 0   | 1   | 100 | 124   | 99  |        |   |     |   |       |   |
| Asian or Pacific Islander               | 2  | 5   | 8   | 4   | 229   | 2   | 2                                       | 100 | 8   | 100 | 223   | 97  | 2           | 100 | 8   | 100 | 227   | 99  |        |   |     |   |       |   |
| Hispanic                                | 0  | 0   | 2   | 1   | 149   | 1   | 0                                       | 0   | 2   | 100 | 148   | 99  | 0           | 0   | 2   | 100 | 148   | 99  |        |   |     |   |       |   |
| Caucasian/White                         | 39   | 91  | 180 | 88  | 12883 | 93  | 39                                      | 100 | 180 | 100 | 12832 | 100 | 39          | 100 | 180 | 100 | 12831 | 100 |        |   |     |   |       |   |
| Not Reported                            | 0  | 0   | 0   | 0   | 0     | 0   | 0                                       | 0   | 0   | 0   | 0     | 0   | 0           | 0   | 0   | 0   | 0     | 0   |        |   |     |   |       |   |
| <b>Identified disability</b>            | 5  | 12  | 31  | 15  | 2383  | 17  | 5                                       | 100 | 31  | 100 | 2366  | 100 | 5           | 100 | 31  | 100 | 2364  | 99  |        |   |     |   |       |   |
| <b>Current LEP</b>                      | 2  | 5   | 3   | 1   | 377   | 3   | 2                                       | 100 | 3   | 100 | 362   | 96  | 2           | 100 | 3   | 100 | 373   | 99  |        |   |     |   |       |   |
| <b>Economically disadvantaged</b>       | 16   | 37  | 77  | 38  | 5819  | 42  | 16                                      | 100 | 77  | 100 | 5782  | 99  | 16          | 100 | 77  | 100 | 5788  | 100 |        |   |     |   |       |   |
| <b>Migrant</b>                          | 0  | 0   | 0   | 0   | 6     | 0   | 0                                       | 0   | 0   | 0   | 6     | 100 | 0           | 0   | 0   | 0   | 6     | 100 |        |   |     |   |       |   |

| MODE OF PARTICIPATION <sup>3</sup>                          | ELA-Reading |    |     |    |       |     | Mathematics |    |     |    |       |     |        |   |     |   |       |   |
|---|-------------|----|-----|----|-------|-----|-------------|----|-----|----|-------|-----|--------|---|-----|---|-------|---|
|   | School      |    | SAU |    | State |     | School      |    | SAU |    | State |     | School |   | SAU |   | State |   |
|   | n           | %  | n   | %  | n     | %   | n           | %  | n   | %  | n     | %   | n      | % | n   | % | n     | % |
| <b>Participation without accommodations</b>                 | 37          | 86 | 164 | 80 | 10439 | 76  | 37          | 86 | 171 | 84 | 10471 | 76  |        |   |     |   |       |   |
| Identified disability (PET/IEP)                             | 1           | 3  | 2   | 1  | 351   | 3   | 1           | 3  | 8   | 5  | 367   | 4   |        |   |     |   |       |   |
| LEP   | 1           | 3  | 1   | 1  | 171   | 2   | 1           | 3  | 1   | 1  | 172   | 2   |        |   |     |   |       |   |
| 504 plan  | 1           | 3  | 2   | 1  | 92    | 1   | 1           | 3  | 2   | 1  | 90    | 1   |        |   |     |   |       |   |
| <b>Participation with accommodations</b>                    | 6           | 14 | 40  | 20 | 3142  | 23  | 6           | 14 | 33  | 16 | 3138  | 23  |        |   |     |   |       |   |
| Identified disability (PET/IEP)                             | 4           | 67 | 29  | 73 | 1860  | 59  | 4           | 67 | 23  | 70 | 1860  | 59  |        |   |     |   |       |   |
| LEP   | 1           | 17 | 2   | 5  | 186   | 6   | 1           | 17 | 2   | 6  | 198   | 6   |        |   |     |   |       |   |
| 504 plan  | 0           | 0  | 0   | 0  | 71    | 2   | 0           | 0  | 0   | 0  | 73    | 2   |        |   |     |   |       |   |
| Other   | 1           | 17 | 10  | 25 | 1060  | 34  | 1           | 17 | 9   | 27 | 1043  | 33  |        |   |     |   |       |   |
| <b>Participation through alternate assessment (PAAP)</b>    | 0           | 0  | 0   | 0  | 155   | 1   | 0           | 0  | 0   | 0  | 137   | 1   |        |   |     |   |       |   |
| Identified disability (PET/IEP)                             | 0           | 0  | 0   | 0  | 155   | 100 | 0           | 0  | 0   | 0  | 137   | 100 |        |   |     |   |       |   |
| LEP   | 0           | 0  | 0   | 0  | 4     | 3   | 0           | 0  | 0   | 0  | 3     | 2   |        |   |     |   |       |   |
| 504 plan  | 0           | 0  | 0   | 0  | 0     | 0   | 0           | 0  | 0   | 0  | 0     | 0   |        |   |     |   |       |   |
| <b>Approved non-participation in reading – 1st year LEP</b> | 0           | 0  | 0   | 0  | 1     | 0   |             |    |     |    |       |     |        |   |     |   |       |   |
| <b>Approved non-participation – special consideration</b>   | 0           | 0  | 0   | 0  | 11    | 0   | 0           | 0  | 0   | 0  | 11    | 0   |        |   |     |   |       |   |
| <b>Non-participation – other</b>                            | 0           | 0  | 0   | 0  | 57    | 0   | 0           | 0  | 0   | 0  | 48    | 0   |        |   |     |   |       |   |

<sup>1</sup>Percents are the percentage of students enrolled in each participation category.

<sup>2</sup>Percents are the percentage of students, including those who participated through alternate assessment (PAAP), who participated in the content area.

<sup>3</sup>Percents are the percentage of students in each content area by mode.

# ELA–READING RESULTS

Test Date: March 2009  
Grade: 4  
SAU: South Portland School Dept  
School: Frank I Brown Elementary School

| ACHIEVEMENT LEVEL DEFINITIONS  |                  | STUDENTS AT EACH ACHIEVEMENT LEVEL |           |            |           |             |           |
|--|------------------|------------------------------------|-----------|------------|-----------|-------------|-----------|
|  |                  | School                             |           | SAU        |           | State       |           |
|  |                  | N                                  | %         | N          | %         | N           | %         |
| <b>Exceeds the Standards</b> – The student’s work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing in-depth inferences, analyzing texts for subtle clues, synthesizing information across texts, and using his/her knowledge of text features and literary devices to make deeper connections within or across texts to increase comprehension. (Scaled Score 462–480)   | 2006-2007        | 6                                  | 12        | 17         | 8         | 507         | 4         |
|  | 2007-2008        | 2                                  | 6         | 9          | 4         | 559         | 4         |
|  | <b>2008-2009</b> | <b>1</b>                           | <b>2</b>  | <b>13</b>  | <b>6</b>  | <b>672</b>  | <b>5</b>  |
|  | Cum. Total*      | 9                                  | 7         | 39         | 6         | 1738        | 4         |
| <b>Meets the Standards</b> – The student’s work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing inferences, summarizing main ideas and providing supporting details, connecting ideas within and across texts, and using his/her knowledge of text features and literary devices to increase comprehension. (Scaled Score 442–460)  | 2006-2007        | 30                                 | 61        | 138        | 65        | 8749        | 63        |
|  | 2007-2008        | 24                                 | 67        | 137        | 62        | 8308        | 59        |
|  | <b>2008-2009</b> | <b>31</b>                          | <b>72</b> | <b>132</b> | <b>65</b> | <b>8917</b> | <b>66</b> |
|  | Cum. Total*      | 85                                 | 66        | 407        | 64        | 25974       | 63        |
| <b>Partially Meets the Standards</b> – The student’s work demonstrates an inconsistent ability to read and interpret literary and informational texts appropriate for the grade level. The student’s ability to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, and use his/her knowledge of text features and literary devices varies depending on the texts. (Scaled Score 432–440)   | 2006-2007        | 8                                  | 16        | 41         | 19        | 3467        | 25        |
|  | 2007-2008        | 7                                  | 19        | 56         | 25        | 3922        | 28        |
|  | <b>2008-2009</b> | <b>9</b>                           | <b>21</b> | <b>46</b>  | <b>23</b> | <b>3241</b> | <b>24</b> |
|  | Cum. Total*      | 24                                 | 19        | 143        | 22        | 10630       | 26        |
| <b>Does Not Meet the Standards</b> – The student’s work demonstrates a limited ability to read and interpret literary and informational texts appropriate for the grade level. The student’s responses are often vague or incorrect leaving the impression that the student found it difficult to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, or use his/her knowledge of text features and literary devices to support comprehension. (Scaled Score 400–430) | 2006-2007        | 5                                  | 10        | 16         | 8         | 1165        | 8         |
|  | 2007-2008        | 3                                  | 8         | 18         | 8         | 1264        | 9         |
|  | <b>2008-2009</b> | <b>2</b>                           | <b>5</b>  | <b>13</b>  | <b>6</b>  | <b>751</b>  | <b>6</b>  |
|  | Cum. Total*      | 10                                 | 8         | 47         | 7         | 3180        | 8         |

| Learning Results<br>Content Standards            | Number<br>of Points<br>Possible |     | Average Points Attained (Number and Percent) |      |      |      |       |      |
|--|---------------------------------|-----|--|------|------|------|-------|------|
|  |                                 |     | School                                       |      | SAU  |      | State |      |
|  | N                               | %   | N  | %    | N    | %    | N     | %    |
| Reading Total Points                             | 48                              | 100 | 31.9   | 66.5 | 31.6 | 65.8 | 31.6  | 65.8 |
| A1/A2 Interconnected Elements/Literary Text      | 24                              | 50  | 16.2   | 67.5 | 16.0 | 66.7 | 16.1  | 67.1 |
| A1/A3 Interconnected Elements/Informational Text | 24                              | 50  | 15.7   | 65.4 | 15.6 | 65.0 | 15.5  | 64.6 |

The MEA assesses students’ reading skills based on questions related to two types of reading passages: literary and informational. Reading passages include both long and short texts, selected from developmentally appropriate works. MEA reading items measure the English Language Arts accountability content standard A, Reading, contained in Maine’s 2007 *Learning Results: Parameters for Essential Instruction*, which can be found at:  
<http://www.maine.gov/education/lres/pei/index.html>.

# ELA-READING RESULTS

## (CONTINUED)

Test Date: March 2009  
 Grade: 4  
 SAU: South Portland School Dept  
 School: Frank I Brown Elementary School

| REPORTING CATEGORIES              | School |   |   |    |    |   |    |   |    |                   | SAU    |    |    |    |    |                   | State  |    |    |    |     |                   |
|-----------------------------------|--------|---|---|----|----|---|----|---|----|-------------------|--------|----|----|----|----|-------------------|--------|----|----|----|-----|-------------------|
|                                   | Tested | E |   | M  |    | P |    | D |    | Mean Scaled Score | Tested | E  | M  | P  | D  | Mean Scaled Score | Tested | E  | M  | P  | D   | Mean Scaled Score |
|                                   | N      | N | % | N  | %  | N | %  | N | %  |                   | N      | %  | %  | %  | %  |                   | N      | %  | %  | %  | %   |                   |
| All Students                      | 43     | 1 | 2 | 31 | 72 | 9 | 21 | 2 | 5  | 447               | 204    | 6  | 65 | 23 | 6  | 446               | 13581  | 5  | 66 | 24 | 6   | 446               |
| Ethnicity                         |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| African American/Black            | 2      |   |   |    |    |   |    |   |    |                   | 13     | 0  | 38 | 38 | 23 | 438               | 408    | 2  | 51 | 31 | 16  | 441               |
| American Indian or Native Alaskan | 0      |   |   |    |    |   |    |   |    |                   | 1      |    |    |    |    | 122               | 1      | 59 | 34 | 6  | 444 |                   |
| Asian or Pacific Islander         | 2      |   |   |    |    |   |    |   |    |                   | 8      | 38 | 50 | 13 | 0  | 455               | 221    | 9  | 62 | 22 | 7   | 447               |
| Hispanic                          | 0      |   |   |    |    |   |    |   |    |                   | 2      |    |    |    |    | 146               | 1      | 64 | 28 | 6  | 445 |                   |
| Caucasian/White                   | 39     | 1 | 3 | 28 | 72 | 9 | 23 | 1 | 3  | 447               | 180    | 6  | 67 | 22 | 6  | 447               | 12684  | 5  | 66 | 24 | 5   | 446               |
| Not Reported                      | 0      |   |   |    |    |   |    |   |    |                   | 0      |    |    |    |    | 0                 |        |    |    |    |     |                   |
| Identified disability             |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Yes                               | 5      | 0 | 0 | 2  | 40 | 3 | 60 | 0 | 0  | 442               | 31     | 0  | 35 | 48 | 16 | 440               | 2211   | 1  | 39 | 42 | 18  | 439               |
| No                                | 38     | 1 | 3 | 29 | 76 | 6 | 16 | 2 | 5  | 447               | 173    | 8  | 70 | 18 | 5  | 448               | 11370  | 6  | 71 | 20 | 3   | 448               |
| Current LEP                       |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Yes                               | 2      |   |   |    |    |   |    |   |    |                   | 3      |    |    |    |    |                   | 357    | 3  | 42 | 36 | 19  | 440               |
| No                                | 41     | 1 | 2 | 29 | 71 | 9 | 22 | 2 | 5  | 447               | 201    | 6  | 65 | 22 | 6  | 446               | 13224  | 5  | 66 | 24 | 5   | 446               |
| Economically disadvantaged        |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Yes                               | 16     | 0 | 0 | 12 | 75 | 3 | 19 | 1 | 6  | 444               | 77     | 3  | 53 | 36 | 8  | 443               | 5677   | 2  | 57 | 32 | 9   | 443               |
| No                                | 27     | 1 | 4 | 19 | 70 | 6 | 22 | 1 | 4  | 448               | 127    | 9  | 72 | 14 | 6  | 449               | 7904   | 7  | 72 | 18 | 3   | 448               |
| Migrant                           |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Yes                               | 0      |   |   |    |    |   |    |   |    |                   | 0      |    |    |    |    |                   | 6      | 0  | 67 | 33 | 0   | 445               |
| No                                | 43     | 1 | 2 | 31 | 72 | 9 | 21 | 2 | 5  | 447               | 204    | 6  | 65 | 23 | 6  | 446               | 13575  | 5  | 66 | 24 | 6   | 446               |
| Gender                            |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Female                            | 20     | 0 | 0 | 13 | 65 | 6 | 30 | 1 | 5  | 444               | 105    | 10 | 70 | 16 | 5  | 448               | 6580   | 7  | 68 | 21 | 5   | 448               |
| Male                              | 23     | 1 | 4 | 18 | 78 | 3 | 13 | 1 | 4  | 449               | 99     | 3  | 60 | 29 | 8  | 445               | 7001   | 3  | 64 | 27 | 6   | 445               |
| Not Reported                      | 0      |   |   |    |    |   |    |   |    |                   | 0      |    |    |    |    |                   | 0      |    |    |    |     |                   |
| Title 1A targeted program         |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Yes                               | 5      | 0 | 0 | 4  | 80 | 0 | 0  | 1 | 20 | 442               | 25     | 0  | 52 | 28 | 20 | 440               | 2127   | 1  | 48 | 42 | 9   | 441               |
| No                                | 38     | 1 | 3 | 27 | 71 | 9 | 24 | 1 | 3  | 447               | 179    | 7  | 66 | 22 | 4  | 447               | 11454  | 6  | 69 | 20 | 5   | 447               |
| Gifted/talented program           |        |   |   |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |     |                   |
| Yes                               | 2      |   |   |    |    |   |    |   |    |                   | 11     | 9  | 91 | 0  | 0  | 457               | 324    | 27 | 72 | 1  | 0   | 458               |
| No                                | 41     | 1 | 2 | 29 | 71 | 9 | 22 | 2 | 5  | 446               | 193    | 6  | 63 | 24 | 7  | 446               | 13257  | 4  | 65 | 24 | 6   | 446               |

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

# ELA-READING RESULTS

## (QUESTIONNAIRE ITEMS)

Test Date: March 2009  
 Grade: 4  
 SAU: South Portland School Dept  
 School: Frank I Brown Elementary School

| QUESTIONNAIRE<br>ITEMS   | School                          |   |   |    |     |   |    |   |    |                         | SAU                             |    |    |     |    |                         | State                           |   |    |    |    |                         |
|--|---------------------------------|---|---|----|-----|---|----|---|----|-------------------------|---------------------------------|----|----|-----|----|-------------------------|---------------------------------|---|----|----|----|-------------------------|
|  | Students<br>in Each<br>Category | E |   | M  |     | P |    | D |    | Mean<br>Scaled<br>Score | Students<br>in Each<br>Category | E  | M  | P   | D  | Mean<br>Scaled<br>Score | Students<br>in Each<br>Category | E | M  | P  | D  | Mean<br>Scaled<br>Score |
|  | %                               | N | % | N  | %   | N | %  | N | %  |                         | %                               | %  | %  | %   | %  |                         | %                               | % | %  | %  | %  |                         |
| <b>How much homework do you do on school nights?</b>   |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. none  | 0                               |   |   |    |     |   |    |   |    |                         | 2                               | 0  | 0  | 100 | 0  | 436                     | 4                               | 2 | 45 | 36 | 17 | 441                     |
| B. less than one hour  | 88                              | 1 | 3 | 28 | 74  | 7 | 18 | 2 | 5  | 447                     | 78                              | 8  | 66 | 19  | 6  | 447                     | 75                              | 5 | 67 | 23 | 4  | 447                     |
| C. one to two hours  | 12                              | 0 | 0 | 3  | 60  | 2 | 40 | 0 | 0  | 445                     | 17                              | 0  | 71 | 23  | 6  | 446                     | 18                              | 5 | 67 | 23 | 5  | 447                     |
| D. more than two hours   | 0                               |   |   |    |     |   |    |   |    |                         | 2                               | 0  | 25 | 75  | 0  | 440                     | 2                               | 3 | 45 | 36 | 16 | 442                     |
| <b>Which of the following best describes how you rate yourself as a student in reading?</b>  |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. very good   | 44                              | 0 | 0 | 13 | 72  | 4 | 22 | 1 | 6  | 447                     | 46                              | 10 | 73 | 14  | 3  | 450                     | 40                              | 8 | 71 | 17 | 4  | 449                     |
| B. good  | 39                              | 1 | 6 | 11 | 69  | 3 | 19 | 1 | 6  | 448                     | 37                              | 5  | 62 | 30  | 3  | 446                     | 45                              | 3 | 66 | 25 | 5  | 446                     |
| C. fair  | 17                              | 0 | 0 | 5  | 71  | 2 | 29 | 0 | 0  | 443                     | 13                              | 0  | 52 | 32  | 16 | 440                     | 13                              | 1 | 54 | 35 | 10 | 442                     |
| D. poor  | 0                               |   |   |    |     |   |    |   |    |                         | 5                               | 0  | 44 | 33  | 22 | 439                     | 2                               | 0 | 39 | 42 | 19 | 439                     |
| <b>How well do the questions that you have just been given on this MEA test match what you have learned in school about reading?</b> |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. The questions on the test match what I have learned in reading class.   | 40                              | 0 | 0 | 12 | 71  | 3 | 18 | 2 | 12 | 446                     | 27                              | 7  | 67 | 22  | 4  | 448                     | 31                              | 8 | 69 | 19 | 4  | 448                     |
| B. They match some of what I have learned.   | 42                              | 1 | 6 | 14 | 78  | 3 | 17 | 0 | 0  | 448                     | 54                              | 8  | 69 | 16  | 6  | 447                     | 53                              | 4 | 68 | 23 | 4  | 447                     |
| C. They match just a little of what I have learned.  | 12                              | 0 | 0 | 2  | 40  | 3 | 60 | 0 | 0  | 442                     | 14                              | 0  | 52 | 38  | 10 | 441                     | 11                              | 2 | 54 | 35 | 10 | 442                     |
| D. There is no match.  | 7                               | 0 | 0 | 3  | 100 | 0 | 0  | 0 | 0  | 450                     | 5                               | 0  | 50 | 50  | 0  | 443                     | 4                               | 1 | 39 | 40 | 20 | 439                     |
| <b>How hard was the reading part of this test?</b>   |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. harder than my regular schoolwork   | 14                              | 0 | 0 | 4  | 67  | 2 | 33 | 0 | 0  | 446                     | 20                              | 0  | 49 | 37  | 15 | 441                     | 19                              | 4 | 54 | 31 | 11 | 443                     |
| B. about the same as my regular schoolwork   | 65                              | 1 | 4 | 20 | 71  | 5 | 18 | 2 | 7  | 446                     | 67                              | 10 | 67 | 19  | 4  | 448                     | 63                              | 6 | 69 | 22 | 4  | 447                     |
| C. easier than my regular schoolwork   | 21                              | 0 | 0 | 7  | 78  | 2 | 22 | 0 | 0  | 449                     | 13                              | 0  | 81 | 19  | 0  | 447                     | 18                              | 4 | 68 | 23 | 5  | 446                     |
| <b>How hard were the reading passages on this test?</b>  |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. Most of the passages were harder than what I normally read.   | 12                              | 0 | 0 | 3  | 60  | 0 | 0  | 2 | 40 | 440                     | 20                              | 0  | 40 | 45  | 15 | 439                     | 13                              | 0 | 39 | 43 | 17 | 439                     |
| B. Most of the passages were about the same as what I normally read.   | 53                              | 1 | 4 | 14 | 61  | 8 | 35 | 0 | 0  | 445                     | 48                              | 5  | 68 | 23  | 4  | 446                     | 52                              | 4 | 69 | 24 | 4  | 446                     |
| C. Most of the passages were easier than what I normally read.   | 35                              | 0 | 0 | 14 | 93  | 1 | 7  | 0 | 0  | 451                     | 33                              | 12 | 76 | 9   | 3  | 451                     | 35                              | 9 | 72 | 16 | 3  | 449                     |
| <b>How much time do you spend reading at home each day?</b>  |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. more than one hour  | 35                              | 1 | 7 | 10 | 67  | 3 | 20 | 1 | 7  | 449                     | 26                              | 13 | 67 | 17  | 2  | 451                     | 21                              | 8 | 68 | 19 | 5  | 448                     |
| B. 20 minutes to an hour   | 56                              | 0 | 0 | 19 | 79  | 4 | 17 | 1 | 4  | 446                     | 58                              | 5  | 72 | 20  | 3  | 447                     | 55                              | 5 | 70 | 21 | 4  | 447                     |
| C. less than 20 minutes  | 5                               | 0 | 0 | 1  | 50  | 1 | 50 | 0 | 0  | 440                     | 7                               | 0  | 40 | 27  | 33 | 437                     | 13                              | 2 | 57 | 33 | 8  | 443                     |
| D. I rarely read at home.  | 5                               | 0 | 0 | 1  | 50  | 1 | 50 | 0 | 0  | 443                     | 9                               | 0  | 33 | 50  | 17 | 438                     | 11                              | 1 | 51 | 37 | 11 | 442                     |
| <b>How many pages do you read in school and to complete homework assignments?</b>  |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A. five or fewer pages   | 43                              | 1 | 6 | 11 | 61  | 4 | 22 | 2 | 11 | 445                     | 24                              | 6  | 62 | 23  | 9  | 446                     | 25                              | 3 | 59 | 30 | 8  | 444                     |
| B. six to ten pages  | 29                              | 0 | 0 | 10 | 83  | 2 | 17 | 0 | 0  | 447                     | 23                              | 0  | 63 | 28  | 9  | 443                     | 24                              | 4 | 64 | 26 | 6  | 445                     |
| C. eleven or more pages  | 29                              | 0 | 0 | 9  | 75  | 3 | 25 | 0 | 0  | 448                     | 53                              | 10 | 68 | 20  | 3  | 449                     | 51                              | 7 | 70 | 20 | 4  | 448                     |
| <b>Optional school/SAU question</b>  |                                 |   |   |    |     |   |    |   |    |                         |                                 |    |    |     |    |                         |                                 |   |    |    |    |                         |
| A.   | 0                               |   |   |    |     |   |    |   |    |                         | 33                              | 0  | 0  | 100 | 0  | 432                     |                                 |   |    |    |    |                         |
| B.   | 0                               |   |   |    |     |   |    |   |    |                         | 0                               |    |    |     |    |                         |                                 |   |    |    |    |                         |
| C.   | 0                               |   |   |    |     |   |    |   |    |                         | 33                              | 0  | 0  | 100 | 0  | 438                     |                                 |   |    |    |    |                         |
| D.   | 0                               |   |   |    |     |   |    |   |    |                         | 33                              | 0  | 0  | 100 | 0  | 438                     |                                 |   |    |    |    |                         |

# MATHEMATICS RESULTS

Test Date: March 2009  
Grade: 4  
SAU: South Portland School Dept  
School: Frank I Brown Elementary School

| ACHIEVEMENT LEVEL DEFINITIONS   |                  | STUDENTS AT EACH ACHIEVEMENT LEVEL |           |            |           |             |           |
|---|------------------|------------------------------------|-----------|------------|-----------|-------------|-----------|
|   |                  | School                             |           | SAU        |           | State       |           |
|   |                  | N                                  | %         | N          | %         | N           | %         |
| <b>Exceeds the Standards</b> – The student’s work demonstrates in-depth understanding of essential concepts in mathematics, including the ability to make multiple connections among central ideas. The student’s responses demonstrate the ability to synthesize information; analyze and solve difficult problems, including developing and implementing strategies, efficiently and accurately performing procedures, and recording and justifying solutions; and explain complex concepts. (Scaled Score 462–480) | 2006-2007        | 1                                  | 2         | 11         | 5         | 1054        | 8         |
|   | 2007-2008        | 2                                  | 6         | 13         | 6         | 1321        | 9         |
|   | <b>2008-2009</b> | <b>3</b>                           | <b>7</b>  | <b>21</b>  | <b>10</b> | <b>1712</b> | <b>13</b> |
|   | Cum. Total*      | 6                                  | 5         | 45         | 7         | 4087        | 10        |
| <b>Meets the Standards</b> – The student’s work demonstrates a general understanding of essential concepts in mathematics, including the ability to make connections among central ideas. The student’s responses demonstrate the ability to analyze and solve problems including developing and implementing strategies, to perform procedures, and to record and explain solutions and concepts. The student’s work may contain minor errors. (Scaled Score 442–460)  | 2006-2007        | 31                                 | 63        | 121        | 57        | 7394        | 53        |
|   | 2007-2008        | 22                                 | 61        | 113        | 51        | 7079        | 51        |
|   | <b>2008-2009</b> | <b>24</b>                          | <b>56</b> | <b>108</b> | <b>53</b> | <b>7270</b> | <b>53</b> |
|   | Cum. Total*      | 77                                 | 60        | 342        | 54        | 21743       | 52        |
| <b>Partially Meets the Standards</b> – The student’s work demonstrates incomplete understanding of essential concepts in mathematics and inconsistent connections among central ideas. The student’s responses demonstrate some ability to analyze and solve problems, and explain concepts. Problem solving strategies may be flawed, procedures performed inaccurately, methods not recorded and/or problems not completed. (Scaled Score 430–440)  | 2006-2007        | 12                                 | 24        | 54         | 25        | 3729        | 27        |
|   | 2007-2008        | 8                                  | 22        | 64         | 29        | 3955        | 28        |
|   | <b>2008-2009</b> | <b>9</b>                           | <b>21</b> | <b>47</b>  | <b>23</b> | <b>3219</b> | <b>24</b> |
|   | Cum. Total*      | 29                                 | 23        | 165        | 26        | 10903       | 26        |
| <b>Does Not Meet the Standards</b> – The student’s work demonstrates limited understanding of essential concepts in mathematics and infrequent or inaccurate connections among central ideas. The student’s responses demonstrate minimal ability to solve problems and explain concepts. Problem solving strategies and procedures are often flawed or inappropriate and there may be many omissions. (Scaled Score 400–428)   | 2006-2007        | 5                                  | 10        | 26         | 12        | 1735        | 12        |
|   | 2007-2008        | 4                                  | 11        | 30         | 14        | 1642        | 12        |
|   | <b>2008-2009</b> | <b>7</b>                           | <b>16</b> | <b>28</b>  | <b>14</b> | <b>1408</b> | <b>10</b> |
|   | Cum. Total*      | 16                                 | 13        | 84         | 13        | 4785        | 12        |

| Learning Results<br>Content Standards | Number<br>of Points<br>Possible |            | Average Points Attained (Number and Percent) |      |      |      |       |      |
|---------------------------------------|---------------------------------|------------|--|------|------|------|-------|------|
|                                       |                                 |            | School                                       |      | SAU  |      | State |      |
|                                       | N                               | %          | N  | %    | N    | %    | N     | %    |
| <b>Mathematics Total Points</b>       | <b>48</b>                       | <b>100</b> | 30.1   | 62.7 | 30.2 | 62.9 | 30.8  | 64.2 |
| <b>A. Number</b>                      | <b>20</b>                       | <b>42</b>  | 11.5   | 57.5 | 11.9 | 59.5 | 12.5  | 62.5 |
| <b>B. Data</b>                        | <b>8</b>                        | <b>17</b>  | 5.5  | 68.8 | 5.4  | 67.5 | 5.3   | 66.3 |
| <b>C. Geometry</b>                    | <b>10</b>                       | <b>21</b>  | 6.3  | 63.0 | 6.3  | 63.0 | 6.5   | 65.0 |
| <b>D. Algebra</b>                     | <b>10</b>                       | <b>21</b>  | 6.9  | 69.0 | 6.6  | 66.0 | 6.5   | 65.0 |

The MEA assesses students’ mathematics knowledge based on questions that measure the mathematics accountability content standards contained in Maine’s 2007 *Learning Results: Parameters for Essential Instruction*, which can be found at: <http://www.maine.gov/education/lres/pei/index.html>.

Content Standard A, Number, includes Whole Number, Rational Number, and Real Number.

Content Standard B, Data, includes Measurement and Approximation, Data Analysis, and Probability.

Content Standard C, Geometry, includes Geometric Figures, Geometric Measurement, and Transformations.

Content Standard D, Algebra, includes Symbols and Expressions, Equations and Inequalities, and Functions and Relations.

# MATHEMATICS RESULTS

## (CONTINUED)

Test Date: March 2009  
 Grade: 4  
 SAU: South Portland School Dept  
 School: Frank I Brown Elementary School

| REPORTING CATEGORIES              | School |   |    |    |    |   |    |   |    |                   | SAU    |    |    |    |    |                   | State  |    |    |    |    |                   |
|-----------------------------------|--------|---|----|----|----|---|----|---|----|-------------------|--------|----|----|----|----|-------------------|--------|----|----|----|----|-------------------|
|                                   | Tested | E |    | M  |    | P |    | D |    | Mean Scaled Score | Tested | E  | M  | P  | D  | Mean Scaled Score | Tested | E  | M  | P  | D  | Mean Scaled Score |
|                                   | N      | N | %  | N  | %  | N | %  | N | %  |                   | N      | %  | %  | %  | %  |                   | N      | %  | %  | %  | %  |                   |
| <b>All Students</b>               | 43     | 3 | 7  | 24 | 56 | 9 | 21 | 7 | 16 | 445               | 204    | 10 | 53 | 23 | 14 | 445               | 13609  | 13 | 53 | 24 | 10 | 446               |
| <b>Ethnicity</b>                  |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| African American/Black            | 2      |   |    |    |    |   |    |   |    |                   | 13     | 0  | 31 | 23 | 46 | 432               | 415    | 5  | 41 | 30 | 24 | 439               |
| American Indian or Native Alaskan | 0      |   |    |    |    |   |    |   |    |                   | 1      |    |    |    |    |                   | 123    | 12 | 46 | 28 | 13 | 445               |
| Asian or Pacific Islander         | 2      |   |    |    |    |   |    |   |    |                   | 8      | 25 | 50 | 25 | 0  | 451               | 225    | 22 | 45 | 20 | 12 | 448               |
| Hispanic                          | 0      |   |    |    |    |   |    |   |    |                   | 2      |    |    |    |    |                   | 147    | 3  | 58 | 30 | 10 | 443               |
| Caucasian/White                   | 39     | 3 | 8  | 22 | 56 | 8 | 21 | 6 | 15 | 446               | 180    | 11 | 56 | 22 | 12 | 446               | 12699  | 13 | 54 | 23 | 10 | 447               |
| Not Reported                      | 0      |   |    |    |    |   |    |   |    |                   | 0      |    |    |    |    |                   | 0      |    |    |    |    |                   |
| <b>Identified disability</b>      |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Yes                               | 5      | 0 | 0  | 2  | 40 | 2 | 40 | 1 | 20 | 439               | 31     | 6  | 26 | 35 | 32 | 438               | 2227   | 3  | 34 | 33 | 30 | 437               |
| No                                | 38     | 3 | 8  | 22 | 58 | 7 | 18 | 6 | 16 | 446               | 173    | 11 | 58 | 21 | 10 | 447               | 11382  | 14 | 57 | 22 | 7  | 448               |
| <b>Current LEP</b>                |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Yes                               | 2      |   |    |    |    |   |    |   |    |                   | 3      |    |    |    |    |                   | 370    | 7  | 35 | 31 | 27 | 439               |
| No                                | 41     | 3 | 7  | 22 | 54 | 9 | 22 | 7 | 17 | 445               | 201    | 10 | 53 | 23 | 13 | 445               | 13239  | 13 | 54 | 23 | 10 | 447               |
| <b>Economically disadvantaged</b> |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Yes                               | 16     | 0 | 0  | 5  | 31 | 7 | 44 | 4 | 25 | 437               | 77     | 3  | 42 | 31 | 25 | 439               | 5704   | 6  | 48 | 30 | 16 | 442               |
| No                                | 27     | 3 | 11 | 19 | 70 | 2 | 7  | 3 | 11 | 449               | 127    | 15 | 60 | 18 | 7  | 449               | 7905   | 18 | 57 | 19 | 6  | 450               |
| <b>Migrant</b>                    |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Yes                               | 0      |   |    |    |    |   |    |   |    |                   | 0      |    |    |    |    |                   | 6      | 17 | 33 | 50 | 0  | 448               |
| No                                | 43     | 3 | 7  | 24 | 56 | 9 | 21 | 7 | 16 | 445               | 204    | 10 | 53 | 23 | 14 | 445               | 13603  | 13 | 53 | 24 | 10 | 446               |
| <b>Gender</b>                     |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Female                            | 20     | 0 | 0  | 11 | 55 | 5 | 25 | 4 | 20 | 441               | 105    | 9  | 56 | 24 | 11 | 446               | 6591   | 12 | 54 | 24 | 11 | 446               |
| Male                              | 23     | 3 | 13 | 13 | 57 | 4 | 17 | 3 | 13 | 448               | 99     | 12 | 49 | 22 | 16 | 445               | 7018   | 13 | 53 | 24 | 10 | 447               |
| Not Reported                      | 0      |   |    |    |    |   |    |   |    |                   | 0      |    |    |    |    |                   | 0      |    |    |    |    |                   |
| <b>Title 1A targeted program</b>  |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Yes                               | 5      | 0 | 0  | 2  | 40 | 2 | 40 | 1 | 20 | 436               | 25     | 0  | 36 | 44 | 20 | 438               | 2131   | 3  | 41 | 38 | 18 | 440               |
| No                                | 38     | 3 | 8  | 22 | 58 | 7 | 18 | 6 | 16 | 446               | 179    | 12 | 55 | 20 | 13 | 446               | 11478  | 14 | 56 | 21 | 9  | 448               |
| <b>Gifted/talented program</b>    |        |   |    |    |    |   |    |   |    |                   |        |    |    |    |    |                   |        |    |    |    |    |                   |
| Yes                               | 2      |   |    |    |    |   |    |   |    |                   | 11     | 82 | 18 | 0  | 0  | 467               | 324    | 64 | 34 | 2  | 0  | 464               |
| No                                | 41     | 2 | 5  | 23 | 56 | 9 | 22 | 7 | 17 | 444               | 193    | 6  | 55 | 24 | 15 | 444               | 13285  | 11 | 54 | 24 | 11 | 446               |

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

# MATHEMATICS RESULTS

## (QUESTIONNAIRE ITEMS)

Test Date: March 2009  
 Grade: 4  
 SAU: South Portland School Dept  
 School: Frank I Brown Elementary School

| QUESTIONNAIRE<br>ITEMS   | School                          |   |    |    |     |   |    |   |     |                         | SAU                             |    |     |     |     |                         | State                           |    |    |    |    |                         |
|--|---------------------------------|---|----|----|-----|---|----|---|-----|-------------------------|---------------------------------|----|-----|-----|-----|-------------------------|---------------------------------|----|----|----|----|-------------------------|
|  | Students<br>in Each<br>Category | E |    | M  |     | P |    | D |     | Mean<br>Scaled<br>Score | Students<br>in Each<br>Category | E  | M   | P   | D   | Mean<br>Scaled<br>Score | Students<br>in Each<br>Category | E  | M  | P  | D  | Mean<br>Scaled<br>Score |
|  | %                               | N | %  | N  | %   | N | %  | N | %   |                         | %                               | %  | %   | %   | %   |                         | %                               | %  | %  | %  | %  |                         |
| <b>How much homework do you do on school nights?</b>   |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. none  | 0                               |   |    |    |     |   |    |   |     |                         | 2                               | 0  | 20  | 0   | 80  | 429                     | 4                               | 4  | 37 | 30 | 28 | 438                     |
| B. less than one hour  | 88                              | 3 | 8  | 21 | 55  | 8 | 21 | 6 | 16  | 445                     | 78                              | 13 | 53  | 22  | 12  | 447                     | 75                              | 13 | 55 | 23 | 9  | 447                     |
| C. one to two hours  | 12                              | 0 | 0  | 3  | 60  | 1 | 20 | 1 | 20  | 447                     | 17                              | 0  | 66  | 23  | 11  | 443                     | 18                              | 12 | 54 | 24 | 10 | 446                     |
| D. more than two hours   | 0                               |   |    |    |     |   |    |   |     |                         | 2                               | 0  | 0   | 100 | 0   | 436                     | 2                               | 7  | 39 | 29 | 25 | 440                     |
| <b>Which of the following best describes how you rate yourself as a student in mathematics?</b>  |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. very good   | 33                              | 3 | 21 | 8  | 57  | 3 | 21 | 0 | 0   | 453                     | 35                              | 22 | 53  | 19  | 6   | 451                     | 37                              | 22 | 56 | 16 | 7  | 451                     |
| B. good  | 44                              | 0 | 0  | 11 | 58  | 5 | 26 | 3 | 16  | 443                     | 43                              | 6  | 53  | 23  | 18  | 443                     | 45                              | 9  | 56 | 25 | 9  | 446                     |
| C. fair  | 14                              | 0 | 0  | 4  | 67  | 1 | 17 | 1 | 17  | 438                     | 17                              | 0  | 59  | 29  | 12  | 441                     | 14                              | 3  | 46 | 34 | 17 | 440                     |
| D. poor  | 9                               | 0 | 0  | 1  | 25  | 0 | 0  | 3 | 75  | 435                     | 4                               | 0  | 33  | 33  | 33  | 440                     | 3                               | 2  | 33 | 35 | 29 | 436                     |
| <b>How well do the questions that you have just been given on this MEA test match what you have learned in school about mathematics?</b> |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. The questions on the test match what I have learned in mathematics class.   | 35                              | 1 | 7  | 10 | 67  | 2 | 13 | 2 | 13  | 447                     | 26                              | 17 | 62  | 13  | 8   | 451                     | 35                              | 19 | 56 | 19 | 7  | 450                     |
| B. They match some of what I have learned.   | 56                              | 1 | 4  | 12 | 50  | 7 | 29 | 4 | 17  | 443                     | 60                              | 9  | 53  | 27  | 11  | 445                     | 51                              | 11 | 56 | 25 | 8  | 446                     |
| C. They match just a little of what I have learned.  | 5                               | 0 | 0  | 2  | 100 | 0 | 0  | 0 | 0   | 455                     | 10                              | 0  | 48  | 24  | 29  | 439                     | 10                              | 5  | 43 | 31 | 21 | 440                     |
| D. There is no match.  | 5                               | 1 | 50 | 0  | 0   | 0 | 0  | 1 | 50  | 443                     | 3                               | 14 | 0   | 29  | 57  | 433                     | 4                               | 3  | 26 | 33 | 37 | 434                     |
| <b>How hard was the mathematics part of this test?</b>   |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. harder than my regular schoolwork   | 21                              | 1 | 11 | 3  | 33  | 2 | 22 | 3 | 33  | 439                     | 26                              | 2  | 50  | 29  | 19  | 440                     | 17                              | 5  | 44 | 31 | 20 | 441                     |
| B. about the same as my regular schoolwork   | 63                              | 1 | 4  | 15 | 56  | 7 | 26 | 4 | 15  | 445                     | 60                              | 14 | 54  | 23  | 9   | 448                     | 62                              | 13 | 57 | 23 | 7  | 448                     |
| C. easier than my regular schoolwork   | 16                              | 1 | 14 | 6  | 86  | 0 | 0  | 0 | 0   | 453                     | 14                              | 10 | 59  | 10  | 21  | 446                     | 21                              | 18 | 53 | 19 | 10 | 449                     |
| <b>On average, how many minutes a day do you spend working on mathematics in class?</b>  |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. less than 30 minutes  | 14                              | 1 | 17 | 2  | 33  | 1 | 17 | 2 | 33  | 436                     | 13                              | 12 | 42  | 31  | 15  | 442                     | 7                               | 6  | 36 | 32 | 27 | 438                     |
| B. 30–45 minutes   | 53                              | 1 | 4  | 15 | 65  | 4 | 17 | 3 | 13  | 447                     | 40                              | 9  | 53  | 23  | 16  | 445                     | 25                              | 7  | 52 | 28 | 12 | 444                     |
| C. 45–60 minutes   | 30                              | 1 | 8  | 6  | 46  | 4 | 31 | 2 | 15  | 446                     | 42                              | 11 | 58  | 23  | 8   | 448                     | 38                              | 14 | 56 | 22 | 8  | 448                     |
| D. more than 60 minutes  | 2                               | 0 | 0  | 1  | 100 | 0 | 0  | 0 | 0   | 442                     | 6                               | 17 | 42  | 17  | 25  | 442                     | 30                              | 18 | 56 | 19 | 7  | 449                     |
| <b>How often do you use calculators in mathematics class?</b>  |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. almost every day  | 2                               | 0 | 0  | 0  | 0   | 0 | 0  | 1 | 100 | 400                     | 3                               | 0  | 17  | 33  | 50  | 430                     | 3                               | 4  | 36 | 31 | 28 | 438                     |
| B. two or three days a week  | 7                               | 1 | 33 | 2  | 67  | 0 | 0  | 0 | 0   | 455                     | 8                               | 6  | 47  | 24  | 24  | 442                     | 12                              | 13 | 51 | 26 | 10 | 446                     |
| C. two or three times each month   | 33                              | 0 | 0  | 10 | 71  | 3 | 21 | 1 | 7   | 445                     | 33                              | 8  | 68  | 17  | 8   | 447                     | 32                              | 15 | 58 | 20 | 7  | 449                     |
| D. never or almost never   | 58                              | 2 | 8  | 12 | 48  | 6 | 24 | 5 | 20  | 445                     | 56                              | 13 | 47  | 27  | 13  | 446                     | 53                              | 11 | 53 | 25 | 11 | 446                     |
| <b>How often do you use hands-on materials in mathematics class?</b>   |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A. almost every day  | 30                              | 1 | 8  | 8  | 62  | 3 | 23 | 1 | 8   | 447                     | 15                              | 7  | 43  | 27  | 23  | 442                     | 26                              | 12 | 50 | 25 | 13 | 445                     |
| B. two or three days a week  | 23                              | 1 | 10 | 7  | 70  | 2 | 20 | 0 | 0   | 449                     | 41                              | 14 | 59  | 20  | 6   | 449                     | 32                              | 14 | 57 | 21 | 7  | 448                     |
| C. two or three times each month   | 35                              | 1 | 7  | 9  | 60  | 3 | 20 | 2 | 13  | 445                     | 27                              | 6  | 56  | 24  | 15  | 444                     | 26                              | 13 | 56 | 22 | 8  | 448                     |
| D. never or almost never   | 12                              | 0 | 0  | 0  | 0   | 1 | 20 | 4 | 80  | 429                     | 18                              | 11 | 44  | 25  | 19  | 443                     | 17                              | 9  | 50 | 27 | 13 | 444                     |
| <b>Optional school/SAU question</b>  |                                 |   |    |    |     |   |    |   |     |                         |                                 |    |     |     |     |                         |                                 |    |    |    |    |                         |
| A.   | 0                               |   |    |    |     |   |    |   |     |                         | 33                              | 0  | 0   | 0   | 100 | 424                     |                                 |    |    |    |    |                         |
| B.   | 0                               |   |    |    |     |   |    |   |     |                         | 0                               |    |     |     |     |                         |                                 |    |    |    |    |                         |
| C.   | 0                               |   |    |    |     |   |    |   |     |                         | 33                              | 0  | 0   | 0   | 100 | 428                     |                                 |    |    |    |    |                         |
| D.   | 0                               |   |    |    |     |   |    |   |     |                         | 33                              | 0  | 100 | 0   | 0   | 452                     |                                 |    |    |    |    |                         |